

Human Wnt Surrogate-Fc Fusion Protein



Cat. No. WNT-HM23A

Description	
Source	Recombinant Human Wnt Surrogate-Fc Fusion Protein is expressed from HEK293 with hFc (IgG1) tag at the C-Terminus.
Molecular Weight	The protein has a predicted MW of 58.50 kDa. Due to glycosylation, the protein migrates to 60-75 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE

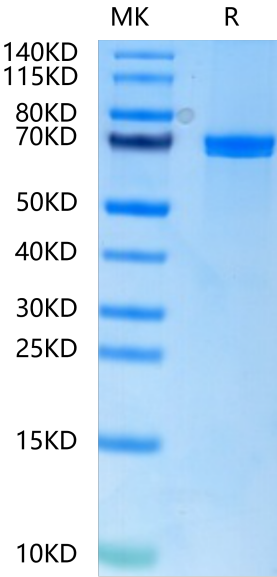
Formulation and Storage	
Formulation	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Wnt-3a is regarded as an activator of the canonical Wnt signaling pathway. This activator is expressed in the dorsal midline region and is responsible for spinal cord development. In addition, Wnt-3a plays a regulatory role in autophagy, apoptosis, and regeneration of neurons, neurogenic inflammation and axon regeneration. Wnt-3a promotes the beta-catenin/Tcf pathway which is tumor inducing and can cause cancer when expressed in particular cell populations. It is also one of the most commonly used cytokines for organoid construction.

Assay Data

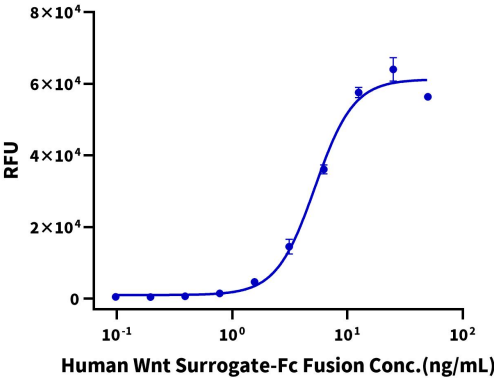
Bis-Tris PAGE



Human Wnt Surrogate-Fc Fusion on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

Cell Based Assay

Recombinant Human Wnt Surrogate-Fc Fusion Bioactivity



Measured by its ability to induce Topflash reporter activity in HEK293T human embryonic kidney cells. The ED50 for this effect is 2-12 ng/mL (QC Test).